Project Design Phase-I

**Proposed Solution Template**

|  |  |
| --- | --- |
| Date | 09 October 2022 |
| Team ID | PNT2022TMID33679 |
| Project Name | Project – Emerging methods for early detection  of fire |
| Maximum Marks | 2 Marks |

**Proposed Solution Template:**

Project team shall fill the following information in proposed solution template.

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Parameter** | **Description** |
| 1. | Problem Statement (Problem to be solved) | Forest fires are occurring throughout the year with an increasing intensity in the summer and autumn periods. These events are mainly caused by the actions of humans, but different nature and environmental phenomena, like lightning strikes or spontaneous combustion of dried leaves or sawdust, can also be credited for their occurrence. Regardless of the reasons for the ignition of the forest fires, they usually cause devastating damage to both nature and humans. This paper presents a description and analysis of forest fire prediction methods based on artificial intelligence. A novel forest fire risk prediction algorithm, based on support vector machines, is presented. |
| 2. | Idea / Solution description | * Avoid burning wastes around dry grass. * Don’t set off pyrotechnics. * Don't start a fire on a windy day. * Use a can or fire pit. * Carefully dispose of smoking material. * Don't throw explosives and combustibles into the fire. |
| 3. | Novelty / Uniqueness | Whenever you smoke, douse your butts with water and place them in a fire-proof container to safely dispose of after you’re sure they’ve gone out. And whatever you do, don’t toss them on the ground. |
| 4. | Social Impact / Customer Satisfaction | Forest fires cause a loss of natural resources, depleting of soil biomass resulting in the loss of  various mobile nutrient |

|  |  |  |
| --- | --- | --- |
| 5. | Business Model (Revenue Model) | * Drones * Robots |
| 6. | Scalability of the Solution | Forest fire prediction constitutes a significant component of forest fire management. It plays a major role in resource allocation, mitigation and recovery efforts. This paper presents a description and analysis of forest fire prediction methods based on artificial intelligence. A novel forest fire risk prediction algorithm, based on support vector machines, is presented. |